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| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/029,123                        | 12/19/2001  | Moise Gaspard        | 1400.1374880        | 2820             |
| 25697                             | 7590        | 09/07/2005           | EXAMINER            |                  |
| ROSS D. SNYDER & ASSOCIATES, INC. |             |                      | TRAN, PHUC H        |                  |
| PO BOX 164075                     |             |                      | ART UNIT            |                  |
| AUSTIN, TX 78716-4075             |             |                      | PAPER NUMBER        |                  |
|                                   |             |                      | 2666                |                  |

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/029,123

Applicant(s)

GASPARD ET AL.

Examiner

PHUC H. TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations in claim 17-19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-8, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 7 recites the limitation "said second logic link" in line 1. There is insufficient antecedent basis for this limitation in the claim.
- Regarding to claim 8, "said second endpoint address information as being associated with a network address only" is not understood what "the network address only" is related in the claim invention.
- Regarding to claim 16, "unnumbered interface" is indefinite for failing to particularly point out and distinctly claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Robinson et al. (U.S. Patent No. 6570867 B1).

- With respect to claims 1, 8, 16, & 32-33, Robinson teaches a method for automatic discovery of logical links associated with network devices (e.g. Fig. 11) comprising the steps of:  
selecting a first managed network device having a first network interface, the first network device being managed by a network management system (Fig. 10);

determining a local interface address and a next neighbor address associated with the first network interface (Fig. 6, user supply SRC and DEST);

comparing the local interface address and next neighbor address with endpoint address information associated with a plurality of logical links stored in a logical link database associated with the network management system (block 60 in Fig. 5);

creating a first logical link between the local interface address and the next neighbor address (block 58 in Fig. 5);

storing the first logical link in the logical link database (col. 9, lines 47-50);

displaying a graphical representation of the first logical link on a display device (col. 9, lines 44-46).

- With respect to claim 2, Robinson comprises the step of comparing the next neighbor address with a managed devices database associated with the network management system (bridge paragraph between col. 8 & 9).

- With respect to claims 3, and 34, Robinson also teaches determining that the next neighbor address is associated with a second managed network device (col. 5, lines 1-30);

identifying the first logical link as a logical link between managed network devices (e.g. link between networks).

- With respect to claim 4, Robinson discloses that the next neighbor address is not associated with a managed network device (e.g. real-time trace routing request);

identifying the first logical link as a logical link between a managed network device and a network address (e.g. rediscovered path).

- With respect to claim 5, Robinson teaches wherein the next neighbor address comprises a subnet address and further comprising the step of identifying the first logical link as a logical link between a managed network device and a subnet (e.g. the address of node 11 in Fig. 1).

- With respect to claim 6, Robinson further teaches wherein the step of creating the first logical link comprises the step of deleting a second logical link in the logical link database (e.g. the step of updated the database).

- With respect to claim 7, Robinson discloses wherein a second logical link comprises first and second endpoint address information, the first endpoint address information comprising the next neighbor address and the second endpoint address information comprising the local interface network address (e.g. the source address and destination address).

- With respect to claims 9-11, Robinson further comprises the step of determining that the local interface address is not associated with any logical link in the logical link database prior to creating the first logical link (e.g. the real-time trace routing).

- With respect to claims 12, and 15, Robinson discloses wherein the local interface address comprises a network address assigned to a port of the first managed network device (e.g. edge node in Fig. 1).

- With respect to claims 13-14, Robinson teaches wherein the next neighbor address comprises a network address assigned to a port of the second managed network device (e.g. edge node of other networks, col. 4, lines 41-44).

- With respect to claims 17-19, Robinson discloses wherein the step of displaying the graphical representation of the first logical link comprises displaying a representation of an arrow from the first managed network device to the second managed network device (e.g. Fig. 3).

- With respect to claims 20-23, Robinson teaches wherein the local interface address comprises a port number of the first network interface and a first IP address of the first managed network device (e.g. the source of IP address).

- With respect to claims 24-25, Robinson discloses wherein the step of determining the local interface number and the next neighbor address for the first network interface comprises sending a first message from the network management system to the first managed network device and receiving a second message from the first managed network device in response to the first message (e.g. the communication between edge nodes in Fig. 1).

- With respect to claims 26-28, 30, and 39, Robinson discloses wherein the first and second messages comprise messages using the SNMP protocol (col. 18, lines 23-24; col. 3, lines 2-4).

- With respect to claims 29, and 31, Robinson teaches wherein the first logical link is identified in the logical link database as a logical link utilizing the first communications protocol (e.g. links communicate in Fig. 1).

- With respect to claims 35, and 37, Robinson discloses an apparatus for discovering logical links associated with network devices comprising:

- a network management system (Fig. 11) comprising:  
a database of managed network devices (25 in Fig. 11);  
a database of logical links associated with the managed network devices (46 in Fig. 10);  
a network communications system for sending messages to managed network devices and receiving messages from the managed network devices (58 in Fig. 5);  
a message analysis system for determining local interface address information and next neighbor address information from messages received from the managed network devices (57 in Fig. 5).

- With respect to claim 36, Robinson further comprises a logical link display for displaying the logical links (col. 9, lines 44-46).

- With respect to claim 38, Robinson discloses a logical link information comparison system for comparing local interface address information and next neighbor address information obtained from messages received by from the managed network devices with endpoint information for the logical links stored in the logical links database (block 60 in Fig. 5).

- With respect to claim 40, Robinson teaches a managed network device identification system for identifying managed network devices associated with the next neighbor address information received from the managed network devices (e.g. block 55, 56 in Fig. 5).



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Suzuki et al. (U.S. Patent No. 6891793 B1) discloses network system.
- O'Neil (U.S. Patent No. 6912587 B1) discloses method for utilizing a generic algorithm to provide constraint-based routing of packets in a communication network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran  
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Art Unit 2664

P.t  
9/3/05



**FRANK DUONG  
PRIMARY EXAMINER**